

TITLE V APPLICATION REVIEW

Polymer Concrete\Fiberglass Manufacturing

Facility #: C-246 **Proc. Engineer:** Brian J. Johnson
Project #: 960660 **Date of Review:** 06/10/97
Date Deemed Complete: 11/05/96

Facility Name: CDR Systems Corp.
Mailing Address: 533 North Nova Road
Ormond Beach, FL 32174

Contact Person: Albert O. Kaeding
Phone: (904) 615-9510

Responsible Official: Albert O. Kaeding
Title: Vice President - Engineering
Phone: (904) 615-9510

I. PROPOSAL

CDR Systems Corp. is proposing that an initial Title V permit be issued for its existing polymer concrete/fiberglass manufacturing plant in Corcoran, CA. The purpose of this evaluation is to identify all applicable requirements, determine if the facility will comply with those applicable requirements, and to provide the legal and factual basis for proposed permit conditions.

II. FACILITY LOCATION

CDR Systems Corp. is located at 745 North Avenue, Corcoran, California.

III. EQUIPMENT LISTING

A detailed facility printout listing all permitted equipment at the facility is shown in Attachment A.

A summary of the exempt equipment categories which describe the insignificant activities or equipment at the facility not requiring a permit is shown in Attachment B. This equipment is not exempt from facility-wide requirements.

IV. MODEL GENERAL PERMIT TEMPLATE USAGE

The applicant has chosen to not use any model general permit templates.

V. SCOPE OF EPA AND PUBLIC REVIEW

The applicant has not requested to utilize any model general permit templates. Therefore, the proposed permit in its entirety is subject to EPA and public review.

VI. APPLICABLE REQUIREMENTS ADDRESSED BY MODEL GENERAL PERMIT TEMPLATES

The applicant has chosen to not use any model general permit templates.

VII. APPLICABLE REQUIREMENTS NOT ADDRESSED BY MODEL GENERAL PERMIT TEMPLATES

District Rule 1100 - Equipment Breakdown (Last Amended 12/17/92)

District Rule 1160 - Emission Statements (Adopted 11/18/92)/

District Rule 2010 - Permits Required (Last Amended 12/17/92)

District Rule 2020 - Exemptions (Last Amended 12/21/94)

District Rule 2031 - Transfer of Permits (Last Amended 12/17/92)

District Rule 2040 - Applications (Last Amended 12/17/92)

District Rule 2070 - Standards for Granting Applications (Last Amended 12/17/92)

District Rule 2080 - Conditional Approval (Last Amended 12/17/92)

District Rule 2520 - Federally Mandated Operating Permits, Sections 5.2, 9.4.2, 9.5.1, 9.5.2, 9.6.1, 9.6.2, 9.8, 9.9.1, 9.9.2, 9.9.3, 9.9.4, 9.9.5, 9.10, 9.13.1, 9.14.1, 9.14.2, 9.17, and 10.0 (Adopted 06/15/95)

District Rule 4101 - Visible Emissions (Last Amended 12/17/92)

District Rule 4601 - Architectural Coatings (Last Amended 12/17/92)

District Rule 8020, 8030, and 8060 - Fugitive Dust (PM₁₀) Emissions (Last Amended 4/25/96)

40 CFR Part 82 - Subpart F, Stratospheric Ozone

40 CFR Part 61 - Subpart M, National Emission Standard for Asbestos

District New and Modified Stationary Source Review Rule (Last Amended 06/15/95)

District Rule 4201 - Particulate Matter Concentration (Last Amended 12/17/92)

District Rule 4202 - Particulate Matter Emission Rate (Last Amended 12/17/92)

District Rule 4623 - Storage of Organic Liquids (Last Amended 9/19/91)

District Rule 4684 - Polyester Resin Operations (Last Amended 5/19/94)

40 CFR Part 68 - Chemical Accident Prevention Provisions (Adopted 1/31/94)

VIII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE

For each Title V source, the District issues a single permit that contains the Federally Enforceable requirements, as well as the District-only requirements. The District-only requirements are not a part of the Title V Operating Permits. The terms and conditions that are part of the facility's Title V permit are designated as Federally Enforceable Through Title V Permit.

For this facility, condition 41 of the facility-wide requirements (C-246-0-1) is not federally enforceable through the Title V Operating Permit.

IX. COMPLIANCE

This section describes how compliance is ensured with each applicable requirement identified in Section VII.

A. Requirements Addressed by Model General Permit Templates

The applicant has chosen to not use any model general permit templates, therefore no requirements have been addressed in this section.

B. Requirements not Addressed by Model General Permit Templates

1. District Rule 1100

Sections 6.0 and 7.0 set forth breakdown procedures and reporting requirements. These requirements are addressed by the facility-wide requirements (C-246-0-1) conditions 1, 2 and 11. District Rule 1100 has been submitted to the EPA to replace Kings County Rule 111. District Rule 1100 is at least as stringent as the Kings County Rule 111 addressing breakdowns (see Table 1).

Table 1 - Comparison of District Rule 1100 and Kings County Rule 111

Requirement	District	KCAPC D
Report breakdown occurrence as soon as reasonably possible but no later than 1 hour after detection	X	X
Obtain variance if occurrence will last longer than a production run or 24 hours whichever is shorter (96 hours for CEM systems)	X	X
Submit a report to the APCO within 10 days of the correction of the breakdown occurrence which includes the following: 1) a statement that the breakdown condition has been corrected, and the date of correction and proof of compliance, 2) a specific statement of the reason(s) or cause(s) for the occurrence sufficient to enable the APCO to determine whether the occurrence was a breakdown condition, 3) a description of the corrective measures undertaken and/or to be undertaken to avoid such an occurrence in the future, and 4) pictures of the equipment or controls which failed if available.	X	X

2. District Rule 1160

Section 5.0 requires the owner or operator of any stationary source to provide the District with a written emission statement showing actual emissions of reactive organic gases (ROGs) and nitrogen oxides (NO_x) from that source. The District waives this requirement for sources emitting less than 25 tons per year of these pollutants if the District provides the Air Resources Board (ARB) with an emission inventory of sources emitting greater than 10 tons per year of NO_x or

ROGs based on the use of emission factors acceptable to the CARB. See the facility-wide requirements (C-246-0-1) condition 3.

3. District Rules 2010 and 2020

District Rule 2010 sections 3.0 and 4.0 require any person building, modifying or replacing any operation that may cause the issuance of air contaminants to apply for an Authority to Construct (ATC) from the District in advance. The ATC will remain in effect until the Permit to Operate (PTO) is granted. District Rule 2020 lists equipment which are specifically exempt from obtaining permits and specifies recordkeeping requirements to verify such exemptions. These requirements are stated in the facility-wide requirements (C-246-0-1) condition 4.

District Rule 2010 and 2020 have been submitted to the EPA to replace Kings County Rule 201 and 202. The comparison of District and County rules, presented below in Table 2, indicates that the District rules are at least as stringent as the county rules.

Table 2 - Comparison of District Rule 2010 and Kings County Rule 201

Requirement	District	KCAPCD
Any person building or replacing equipment must apply for an Authority to Construct.	X	X
Any person altering equipment must apply for an Authority to Construct.	X	
Before operation, a Permit to Operate must be obtained.	X	X
A Permit to Operate must be posted on the equipment.	X	X
A person shall not willfully deface, alter, forge, counterfeit, or falsify a Permit to Operate.	X	X
The Authority to Construct shall serve as a temporary Permit to Operate for newly constructed or modified sources. The application for a Permit to Operate shall serve as a temporary Permit to Operate for existing sources that apply for a Permit to Operate.	X	

Table 3 - Comparison of District Rule 2020 and Kings County Rule 202

Requirements	District	KCAPCD
An ATC or PTO is not required for listed exempt equipment.	X	X
Conditions are stated under which listed exempt equipment will require an ATC or PTO.	X	
Recordkeeping is required to verify and maintain exemption, when the exemption is based on a maximum daily limitation.	X	
A compliance schedule is stated for equipment which loses exemption from permitting, necessitating submission of a PTO application.	X	

4. District Rules 2031, 2070 and 2080

These rules set forth requirements to comply with all conditions of the Permit to Operate. Permits to Operate or Authorities to Construct are not transferable unless a new application is filed with and approved by the District. All source operations must be constructed and operated as specified in the Authority to Construct. See the facility-wide requirements (C-246-0-1) conditions 5 and 6.

Table 4 - Comparison of District Rule 2031 and Kings County Rule 203.1

Requirement	District	KCAPCD
A PTO or an ATC shall not be transferable from location to location or from person to person unless a new application is filed and approved by the APCO.	X	X

Table 5 - Comparison of District Rule 2070 and Kings County Rule 208

Requirement	District	KCAPC D
ATC or PTO applications shall be denied unless the applicant shows that Health and Safety Codes Section 41700, 41701, or 42301 are not violated.	X	
ATC or PTO applications shall be denied unless the applicant shows that Health and Safety Codes Section 41700 or 41701 are not violated.	X	X
PTO applications shall be denied unless the applicant follows the ATC.	X	X
ATC or PTO applications shall be denied unless the applicant complies with Rule 2201.	X	
ATC or PTO applications shall be denied unless the applicant will comply with both NSPS and NESHAP requirements.	X	
A person shall not operate any source operation contrary to conditions specified on the Permit to Operate.	X	

Table 6 - Comparison of District Rule 2080 and Kings County Rule 209

Requirement	District	KCAPC D
The APCO may issue an ATC or PTO subject to conditions that shall be specified in writing.	X	X

5. District Rule 2040

Section 3.0 requires that every application for a permit shall be filed in a manner and form prescribed by the District. See the facility-wide requirements (C-246-0-1) condition 7.

District Rule 2040 has been submitted to the EPA to replace Kings County Rule 204. The District rule is at least as stringent as the county, as shown in Table 7 below.

Table 7 - Comparison of District Rule 2040 and Kings County Rule 204

Requirement	District	KCAPC D
Every application for a permit shall be filed in the manner and form prescribed by the APCO and shall give all the information necessary to enable the APCO to determine whether to grant or deny a permit.	X	X
The APCO shall notify the applicant in writing in the event of a denial. The applicant may deem the Permit to Operate denied if the APCO fails to act on the PTO within 60 calendar days after filing. The applicant may petition the Hearing Board in writing for a public hearing in the event of an application denial.	X	

6. District Rule 2520

Section 5.2 requires that permittees submit applications for the requirements for permit unit renewal at least six months prior to permit expiration. Permit C-246-0-1 condition 36 ensures compliance with this requirement.

Section 9.0 of District Rule 2520 requires certain elements to be contained in each the requirements for permit unit:

Section 9.4.2 requires that periodic monitoring and/or recordkeeping be performed if none is associated with a given emission limit to ensure compliance. Periodic monitoring and recordkeeping consisting of the retention of daily reports of process throughput rate and of maintenance records will be supported by permit conditions 15, 18, 20, and 21 of permit C-246-1-2.

Sections 9.5.1 and 9.5.2 contains requirements to incorporate all applicable recordkeeping requirements into the Operating Permit, specific records of any required monitoring, and the retention of all required monitoring data and support information for five years. the requirements to keep specific monitoring records and retain records for five years are stated in the facility-wide requirements (C-246-0-1) conditions 8 and 9, respectively.

Section 9.6 contains requirements for the submittal of reports of monitoring at least every six months and prompt reporting of deviations from permitting requirements, including those attributable to upset conditions. All required reports must be certified by the responsible official. These requirements are stated in the facility-wide requirements (C-246-0-1) conditions 10 and 11.

Section 9.8 states that the Operating Permit must also contain a severability clause in case of a court challenge; the severability clause is stated in the facility-wide requirements (C-246-0-1) condition 12.

Section 9.9 contains requirements for provisions in the Operating Permit stating: 1) that the permittee must comply with all permit conditions; 2) that the permitted activity would have to be reduced to comply with the permit conditions should not be a defense in an enforcement action, 3) that the permit may be revoked, modified, reissued, or reopened for cause, 4) that the Operating Permit does not reflect any property rights, and 5) that the permittee will furnish the District with any requested information to determine compliance with the conditions of the Operating Permit. Compliance with these sections of Rule 2520 will be ensured by the facility-wide requirements (C-246-0-1) conditions 5 and 13-16.

Section 9.10 contains the requirement to provide in the permit that the permittee pay annual permit fees and applicable fees from District Rules 3010, 3030, 3050, 3080, 3090, 3110, and 3120. This requirement is stated in the facility-wide requirements (C-246-0-1) condition 17.

Section 9.14.1 requires any report or document submitted under a permit requirement or a request for information by the District or EPA shall contain a certification by a responsible official to truth, accuracy, and completeness. Compliance with this section will be ensured by the facility-wide requirements (C-246-0-1) condition 28.

Section 9.14.2 contains inspection and entry requirements that allows an authorized representative of the District to enter a permittee's premises to inspect equipment , operations, work practices, permits on file, and to sample substances or monitor parameters for the purpose of assuring compliance with the permit requirements. Compliance with this section will be ensured by the facility-wide requirements (C-246-0-1) conditions 18, 19, 20 and 21.

Section 9.17 requires that the permittee submit certification of compliance with the terms and standards of the requirements for permit units to the EPA and the District annually (or more frequently as

required by the applicable requirement or the District). The facility-wide requirements (C-246-0-1) condition 35 ensures compliance with this requirement.

Section 10.0 Requires any application form, report or compliance certification submitted pursuant to these regulations shall contain certification of truth accuracy, and completeness by a responsible official. Compliance with this section will be ensured by the facility-wide requirements (C-246-0-1) condition 28.

7. District Rule 4101

District Rule 4101 has been submitted to the EPA to replace Rule 401 (all counties of the District). EPA made a preliminary determination that District Rule 4101 is "more stringent" than the county versions previously referenced, per correspondence dated August 20, 1996.

Section 5.0 prohibits the discharge of any air contaminant for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker in shade as that designated as No. 1 on the Ringelmann Chart; or is of an opacity as to obscure an observer's view to a degree equal to or greater than 20% opacity. This requirement is stated in the facility-wide requirements (C-246-0-1) as condition 22.

8. District Rule 4601

This rule limits the emissions of VOCs from architectural coatings. It requires limiting the application of coating to no more than 250 grams of VOC/liter of coating (less water and exempt compounds). It also forbids the use of coating from the list in the Table of Standards (section 5.2) and limits the use of Specialty Coatings to a VOC content not to exceed the specified limits in Table 1 of Rule 4601. This rule further specifies labeling requirements, coatings thinning recommendations, storage requirements and cleanup requirements. See the facility-wide requirements (C-246-0-1) conditions 23, 24, 25, 26 and 27.

9. District Regulation VIII - Fugitive Dust (PM10)

These regulations contain requirements for the control of fugitive dust. These requirements apply to various sources: construction, demolition, excavation, extraction, and water mining activities; outdoor storage piles; paved and unpaved roads. Compliance with

these regulations will be required by the facility-wide requirements (C-246-0-1) conditions 31, 32 and 33.

10. 40 CFR Part 61, Subpart M - National Emissions Standards for Asbestos

There are applicable requirements from the National Emissions Standards for Hazardous Air Pollutants that apply to all sources in general. These requirements pertain to asbestos removal and disposal from renovated or demolished structures. Compliance is ensured for these requirements by the facility-wide requirements (C-246-0-1) condition 34.

11. 40 CFR Part 82, Subpart F - Stratospheric Ozone

There are applicable requirements from Title VI of the CAA (Stratospheric Ozone) that apply to all sources in general. These requirements pertain to air conditioners, chillers and refrigerators located at a Title V source and to the disposal of air conditioners or maintenance/recharging/disposal of motor vehicle air conditioners (MVAC). These requirements are addressed in the facility-wide requirements (C-246-0-1) conditions 29 and 30.

12. District New and Modified Stationary Source Review Rule

a. Polymer Concrete\Fiberglass Manufacturing, C-246-1-1

The original ATC for this facility was issued in 1990 by the Kings County Air Pollution Control District. A more recent ATC has been issued by the District on 5/20/97. The subsequent permit conditions are based upon the most recent ATC.

- Condition 1 from the ATC was included as condition 41 of the facility-wide requirements (C-246-0-1). The wording of the included condition is identical to the wording of the ATC condition. This condition is not federally enforceable because it is based on the public nuisance requirements of the California Health and Safety Code rather than a federally applicable requirement.
- Condition 2 from the ATC was included as condition 1 of the requirements for permit unit C-246-1-2. The wording of the included condition is identical to the wording of the ATC condition.
- Condition 3 from the ATC was included as condition 2 of the requirements for permit unit C-246-1-2. The wording of the

included condition is identical to the wording of the ATC condition.

- Condition 4 from the ATC was included as condition 3 of the requirements for permit unit C-246-1-2. The wording of the included condition is identical to the wording of the ATC condition.
- Condition 5 from the ATC was included as condition 4 of the requirements for permit unit C-246-1-2. The wording of the included condition is identical to the wording of the ATC condition.
- Condition 6 from the ATC was included as condition 5 of the requirements for permit unit C-246-1-2. The wording of the included condition is identical to the wording of the ATC condition.
- Condition 7 from the ATC was included as condition 6 of the requirements for permit unit C-246-1-2. The wording of the included condition is identical to the wording of the ATC condition.
- Condition 8 from the ATC was included as condition 7 of the requirements for permit unit C-246-1-2. The wording of the included condition is identical to the wording of the ATC condition.
- Condition 9 from the ATC was included as condition 8 of the requirements for permit unit C-246-1-2. The wording of the included condition is identical to the wording of the ATC condition.
- Condition 10 from the ATC was included as condition 9 of the requirements for permit unit C-246-1-2. The wording of the included condition is identical to the wording of the ATC condition.
- Condition 11 from the ATC was included as condition 10 of the requirements for permit unit C-246-1-2. The wording of the included condition is identical to the wording of the ATC condition.
- Condition 12 from the ATC was included as condition 11 of the requirements for permit unit C-246-1-2. The wording of the included condition is identical to the wording of the ATC condition.
- Condition 13 from the ATC was included as condition 12 of the requirements for permit unit C-246-1-2. The wording of the included condition is identical to the wording of the ATC condition.
- Condition 14 from the ATC was included as condition 13 of the requirements for permit unit C-246-1-2. The wording of the

included condition is identical to the wording of the ATC condition.

- Condition 15 from the ATC was included as condition 14 of the requirements for permit unit C-246-1-2. The wording of the included condition is identical to the wording of the ATC condition.
- Condition 16 from the ATC was included as condition 15 of the requirements for permit unit C-246-1-2. The wording of the included condition is identical to the wording of the ATC condition. This condition requires that records be kept in accordance with Rule 4684 - Polyester Resin Operations for each of the eight processing operations. Rule 4684 requires that records be maintained for 1) type and quantity of all resins, catalysts, and cleaning materials used; 2) VOC weight percent of all materials; 3) weight loss per square meter during resin polymerization for each vapor-suppressed resin; and 4) records of operation hours. This record keeping provides the necessary monitoring for conditions 5 through 14 discussed above.
- Condition 17 from the ATC, which requires the retention of all records for five years and for records to be made available for District inspection, are enforced by the facility-wide requirements (C-246-0-1) conditions 9 and 19.
- Condition 18 from the ATC was included as condition 16 of the requirements for permit unit C-246-1-2. The wording of the included condition is identical to the wording of the ATC condition.

13. District Rule 4201 - Particulate Matter Concentration

Section 3.1 requires that a source not discharge dust, fumes, or total suspended particulate matter emission in excess of 0.1 gr/ft³.

Although spray application of resins is prohibited by condition 5 of the requirements for permit unit C-246-1-2, a small amount of particulate emissions occur during the product finishing operation (grinding, cutting, sanding) at this facility. Emissions from this operation are exhausted through the general building ventilation.

The 8/14/87 engineering evaluation done by Kings County APCD for the original ATC indicates a maximum PM emission rate of 11.5 lb/day for this operation. The air flow was indicated to be 36,000 cfm. The PM concentration will be:

$$(11.5 \text{ lb/day}) (7000 \text{ gr/lb}) (1 \text{ day}/480 \text{ min}) = 168 \text{ gr/min}$$

$$(55.9 \text{ gr/min}) / (36,000 \text{ ft}^3/\text{min}) = 0.0047 \text{ gr/ft}^3$$

Therefore, compliance is expected and no additional monitoring is required. A Permit condition has been added that contains the emission limit of this rule. See permit condition 17 of the requirements for permit unit C-246-1-2.

14. District Rule 4202 - Particulate Matter Emission Rate

This rule applies to any source operation which emits particulate matter. Rule 4202 contains the same requirements as KCAPCD Rule 405 as is shown in the following table. The compliance demonstration, which follows the table, demonstrates compliance for both District Rule 4202 and KCAPCD Rule 405.

Table 8 - Comparison of District Rule 4202 and Kings County Rule 405

Requirement	District	KCAPCD
A person shall not discharge into the atmosphere particulate matter in excess of an exponential equation that is defined in each of the rules. The equation is identical for each of the rules.	X	X

The maximum allowable emission rate is given as a function of the process weight rate in section 4 of Rule 4202. The function is shown below.

For process rates up to 60,000 lbs/hour:

$$E = 3.59 P^{0.62}$$

For process rates greater than 60,000 lbs/hour:

$$E = 17.31 P^{0.16}$$

where: E = emission rate of particulate matter (lb/hr)

P = process weight rate (ton/hr)

The 8/14/87 engineering evaluation done by Kings County APCD for this facility indicated the maximum process rate would be 23,000 lbs/day or 1.44 tons per hour (this was determined to be consistent with the 250 lb/day VOC emission limit), therefore the maximum allowable PM emission is:

$$E = 3.59 (1.44)^{0.62} = 4.5 \text{ lb/hr}$$

The maximum estimated PM emission from the finishing operation at the same process rate is 1.4 lb/hr based on the 8/14/87 engineering evaluation. In addition, the applicant has submitted information in Section 8.4 of the Title V application which details an analysis of the dust generation at the facility. References are made to a source test done at a sister plant located in Palatka, FL. As stated in the application, this facility has nearly identical operations as the Corcoran, CA facility. The analysis shows an approximate particulate emission rate of 4.3 lbs per day, which is well below the permitted amount of 11.5 lbs per day. Please see the "Dust Generation Analysis" on page 24 of the application.

Therefore, compliance with the rule is expected and no additional monitoring is required.

15. District Rule 4623 - Storage of Organic Liquids

Section 2.0 describes the applicability of the Rule as being for equipment used to store organic liquids with a true vapor pressure of greater than 1.5 psia. The vapor pressure for styrene is 5 mm Hg @ 20 °C, or 0.0965 psi. Therefore, this rule is not applicable.

16. District Rule 4684 - Polyester Resin Operations

The purpose of this rule is to reduce emissions of volatile organic compounds from polyester resin operations. The provisions of this rule apply to commercial and industrial polyester resin operations.

Section 5.1 lists the process and control requirements. These requirements include section 5.1.1 which mandates the use of one of four listed operational techniques to control VOC emissions. The facility has chosen to use low VOC and vapor-suppressed polyester resin options described in section 5.1.1. In addition, section 5.1.2 limits the methods usable for the spray application of polyester resin to airless, air assisted airless, HVLP, or electrostatic spray equipment. The requirements for permit unit C-246-1-2 conditions 4 and 5 ensure compliance with these requirements.

Section 5.2 includes a limit for cleaning materials of 1.7 pounds of VOC per gallon, and the exceptions to this limit. The requirements for permit unit C-246-1-2 condition 19 ensures compliance with this requirement.

Section 5.3 describes storage and disposal requirements. The requirements for permit unit C-246-1-2 conditions 2 and 3 ensure compliance with these requirements.

Section 6.1 lists the recordkeeping requirements, including daily records of the type and quantity of all resins, catalysts, and cleaning materials used in each operation; records of the VOC content, in weight percent, of all polyester resin materials used or stored at the facility; records of the VOC content of all cleaning materials; and records of hours of operation and key operating parameters for any add-on control equipment. The requirements for permit unit C-246-1-2 condition 15 ensures compliance with these requirements.

Section 6.2 describes the methods for analysis of the cleaning materials, polyester resin materials, and control efficiency. Section 6.2.3 requires the use of ASTM D2369-87 or SCAQMD Test Method 312 for determining the monomer content of uncatalyzed resin material. Section 6.2.4 requires the use of EPA Method 24 to determine the VOC content of cleaning materials. The requirements for permit unit C-246-1-2 condition 18 ensures compliance with these requirements.

17. 40 CFR Part 68 - Chemical Accident Prevention Provisions

The requirements of this provision mandates that the subject facility submit to the proper authority a Risk Management Plan. Permit Condition 40 of the facility-wide requirements (C-246-0-1) requires compliance with this provision.

X. PERMIT SHIELD

A permit shield legally protects a facility from enforcement of the shielded regulations when a source is in compliance with the terms and conditions of the Operating Permit. Compliance with the terms and conditions of the Operating Permit is considered compliance with all applicable requirements upon which those conditions are based, including those that have been subsumed.

A. Requirements Addressed by Model General Permit Templates

The applicant has not requested to utilize any model general permit templates.

B. Requirements not Addressed by Model General Permit Templates

1. District Rule 1100, 6.1 and 7.0

Compliance with these requirements was addressed in Section IX of this document, and is ensured by the facility-wide requirements (C-246-0-1) conditions 1 and 2. Therefore, a permit shield is being granted for these requirements in the facility-wide requirements (C-246-0-1) condition 39.

2. District Rule 2010, 3.0 and 4.0

Compliance with these requirements was addressed in Section IX of this document, and is ensured by the facility-wide requirements (C-246-0-1) condition 4. Therefore, a permit shield is being granted for these requirements in the facility-wide requirements (C-246-0-1) condition 39.

3. District Rule 2031; 2070, 7.0; and 2080

Compliance with these requirement was addressed in Section IX of this document, and is ensured by the facility-wide requirements (C-246-0-1) conditions 5 and 6. Therefore, a permit shield is being granted for these requirements in the facility-wide requirements (C-246-0-1) condition 39.

4. District Rule 2040

Compliance with this requirement was addressed in Section IX of this document, and is ensured by the facility-wide requirements (C-246-0-1) condition 7. Therefore, a permit shield is being granted for these requirements in the facility-wide requirements (C-246-0-1) condition 39.

5. District Rule 4101

Compliance with this requirement was addressed in Section IX of this document, and is ensured by the facility-wide requirements (C-246-0-1) condition 22. Therefore, a permit shield is being granted for this requirement in the facility-wide requirements (C-246-0-1) condition 39.

6. District Rule 4601, 5.1, 5.2, 5.4, 5.5, 6.1, and 6.2

Compliance with these requirements was addressed in Section IX of this document, and is ensured by the facility-wide requirements (C-246-0-1) conditions 23, 24, 25, 26, and 27. Therefore, a permit shield is being granted for these requirements in the facility-wide requirements (C-246-0-1) condition 39.

7. District Rule 8020, 8030, and 8060

Compliance with these requirements was addressed in Section IX of this document, and is ensured by the facility-wide requirements (C-246-0-1) conditions 31, 32, and 33. Therefore, a permit shield is being granted for these requirements in the facility-wide requirements (C-246-0-1) condition 39.

8. District Rule 4201

Compliance with this requirement was addressed in Section IX of this document, and is ensured by the requirements for permit unit C-246-1-2 condition 17. Therefore, a permit shield is being granted for this requirement in the requirements for permit unit C-246-1-2 condition 22.

9. District Rule 4202

Compliance with this requirement was addressed in Section IX of this document, and no further demonstration is required. Therefore, a permit shield is being granted for this requirement in the requirements for permit unit C-246-1-2 condition 22.

10. District Rule 4623

Compliance with this requirement was addressed in Section IX of this document. A permit shield, in the requirements for permit unit C-246-1-2 condition 22, shall be granted for this requirement while the storage of organic liquids at this facility meet the provisions of the exemption.

11. District Rule 4684

Compliance with this requirement was addressed in Section IX of this document, and is ensured by the requirements for permit unit C-246-1-2 conditions 2-5, 15, and 19. Therefore, a permit shield is being granted for this requirement in the requirements for permit unit C-246-1-2 condition 22.

12. 40 CFR Part 68

Compliance with this requirement was addressed in Section IX of this document, and is ensured by the facility-wide requirements (C-246-0-1) condition 40. However, EPA has commented that permit shields for the requirements of this regulation are unnecessary. Therefore, a permit shield shall not be given.

13. 40 CFR Part 61, Subpart M

Compliance with this requirement was addressed in Section IX of this document, and is ensured by the facility-wide requirements (C-246-0-1) condition 34. However, EPA has commented that permit shields for the requirements of this regulation are unnecessary. Therefore, a permit shield shall not be given.

14. 40 CFR Part 82, Subpart F

Compliance with this requirement was addressed in Section IX of this document, and is ensured by the facility-wide requirements (C-246-0-1) conditions 29 and 30. However, EPA has commented that permit shields for the requirements of this regulation are unnecessary. Therefore, a permit shield shall not be given.

XI. PERMIT CONDITIONS

See the proposed operating permit conditions starting on the next page.

EPA COMMENTS / DISTRICT RESPONSE

The EPA's comment regarding the proposed Title V Operating Permit for CDR Systems Inc. (District facility C-246) is encapsulated below followed by the District's response. A copy of the EPA's 9/19/97 letter is available at the District.

OBJECTION ISSUES

1. EPA COMMENT

The facility has several types of VOC emission limits. The first limits emissions in units of lbs/square meter, for which there is a SCAQMD method provided to determine compliance. For the resin styrene monomer content limit, an ASTM method is specified to determine compliance. The permit also contains a set of limits, depending on the application process, on the amount of VOC that can be emitted as a percent of the styrene monomer content of the resin. Condition 21 of the permit states in part that, "The VOC emissions rate shall be calculated by mass balance by determining the weight loss during polymerization for one representative sample for each of the lay-up and molding processes." We believe that this mass balance test method, which relies on weighing a representative product before and after the resin is applied, does not produce accurate results because it does not specify how the product is to be weighed, or how long the resin will be allowed to off-gas before the second measurement is taken. We are concerned that without a specific test method, the results will not be consistent and are unlikely to be valid. San Joaquin must develop more specific test requirements. Some of the elements that this test method include the following:

- A high-precision scale with adequate capacity for the mold and part must be used. Especially for low emission limits (1.5% of the styrene monomer content of the resin), accurate measurements are critical.
- The weights of all materials, overspray, if applicable, the mold, and part must be recorded correctly in the beginning and at the end when curing is complete. All tools that come into contact with gel coat or resin materials must be weighed before and after the testing so that any materials adhering to these items is accounted for.
- An accurate means of determining the amount of resin applied must be specified. If possible, the resin container should be weighed before and after the application.

- Initial and final weights of other materials, such as fiberglass reinforcement and catalyst should be recorded.
- A mass balance equation should be included. The equation should consider the following elements: overspray, if a spray application method is used, initial and final weight of tools and other items coming into contact with the resin, the initial and final weights of materials including gel coat, resin, catalysts, fiberglass, and of the pump system, the empty weight of the mold, and final weight of the mold with part.
- A specification of when the second measurement will be recorded. This should probably be when the resin has completed the curing process.
- A requirement to record all parameters measured in the test, and the times when each measurement is taken.

Without a detailed method, results will vary and be inaccurate. Of greatest concern is that there is no specification for when the “after” measurement will take place. If the second measurement takes place before the resin is completely cured, the amount of styrene emitted will be underestimated.

DISTRICT RESPONSE

Conditions have been added to the proposed permit to specify the necessary parameters to conduct an accurate weight test. The following wording has been added:

20. The VOC emissions rate during fabrication shall be determined and recorded annually as a percentage of the weight loss of styrene monomer in the resin. The weight loss shall be determined by SCAQMD Method 309 or by a mass balance test on a representative sample for each of the layup and molding processes being employed by the facility. [District Rule 2520, 9.4.2]

21. During a weight loss test, a precision scale with adequate capacity shall be used; each representative sample shall be allowed to off-gas for at least 24 hours; the mass balance shall include accurate measurements of the amount of resin applied, the amount of fiberglass and catalyst used, and the initial and final weights of all tools used in the fabrication process; and all times and parameters measured in the test shall be recorded. [District Rule 2520, 9.4.2]

2. EPA COMMENT

In order to assure compliance with the 250 lb/day VOC emission limit in permit condition 15, daily recordkeeping requirements must be added to the permit. In order to demonstrate compliance with this limit, CDR must be required to keep

records of the amount and type of resin used, including the resin's styrene content, in each process each day. Records of the amount, in gallons, and solvent content of cleaning solvents must also be required. This information would also be adequate to demonstrate compliance with the cleaning material limitations in permit condition 20.

DISTRICT RESPONSE

Condition 15 of the proposed permit requires that records be kept in accordance with section 6.1 of District Rule 4684. This rule specifies the following recordkeeping:

- Daily records of the type and quantity of all resins, catalysts, and cleaning materials used in each operation.
- Records of the VOC content, in weight percent, of all polyester resin material used or stored at the facility.
- Records of the VOC content of all cleaning materials used and stored at the facility as specified in Section 5.2.
- Records showing the weight loss per square meter during resin polymerization for each vapor-suppressed resin.
- Records of hours of operation and key operating parameters for any add-on control equipment.

3. EPA COMMENT

The District presented a demonstration to show that the source's operations would not likely exceed the PM emission concentration limit of Rule 4201 and the PM emission rate of Rule 4202, since the maximum estimated emissions at the facility are below the limits. Accordingly, the analysis states that no additional monitoring is needed. (The maximum PM mass emission rate and operational parameters used in the calculations were based on the August 14, 1987 engineering evaluation done by Kings County for the source.)

However, according to San Joaquin's staff members during the conference call on September 16, 1997, the data employed in the demonstration may not be entirely reliable. For example, the estimated maximum PM mass emission rate of 11.5 lb/hr came from an unverified assumption that approximately 0.1% of the mass of work piece materials is emitted into the air in the form of PM during grinding operations.

Thus, it seems evident that the existing data cannot be relied upon to demonstrate compliance with the emission limits. Consequently, unless San Joaquin can provide EPA with new information that no additional monitoring is needed, the District must require initial stack testing to determine compliance and adequate periodic monitoring to assure continued compliance. EPA's review of proposed NSR permits from the District for cotton gin sources, which have some units with air flow rates higher than that of CDR, indicates that it is technically feasible to source

test for PM under similar operating conditions. (If the source has trouble meeting the PM emission limits, a control device, such as a cyclone, may help achieve compliance.)

DISTRICT RESPONSE

The applicant has submitted information in Section 8.4 of the Title V application which details an analysis of the dust generation at the facility. References are made to a source test done at a sister plant located in Palatka, FL. As stated in the application, this facility has nearly identical operations as the Corcoran, CA facility. The analysis shows an approximate particulate emission rate of 4.3 lbs per day, which is well below the permitted amount of 11.5 lbs per day. Please see the "Dust Generation Analysis" on page 24 of the application.

4. EPA COMMENT

The District stated in the engineering analysis of the permit that since the total capacity of all organic storage tanks at the facility is less than 19,800 gallons, the operation is not subject to the control requirements of Rule 4623. However, this does not exempt the tanks from the recordkeeping requirements of Rule 4623. The District must add condition(s) to address these requirements in order to address all applicable requirements, and before a complete shield from Rule 4623 can be granted in Condition 22 (Permit C-246-1-2).

DISTRICT RESPONSE

Section 2.0 of District Rule 4623 describes the applicability of the Rule as being for equipment used to store organic liquids with a true vapor pressure of greater than 1.5 psia. The vapor pressure for styrene is 5 mm Hg @ 20 °C, or 0.0965 psi. Therefore, this rule is not applicable. The proposed engineering evaluation and permit conditions shall be changed to reflect this modification.

5. EPA COMMENT

For this facility, opacity may result from the grinding operations. The District has not addressed the frequency of testing necessary to assure compliance with the 20% opacity limit. The District must either provide a frequency for such monitoring in the permit, or provide a demonstration that current permit conditions assure compliance. See Texaco objection issue #3.

DISTRICT RESPONSE

The applicant has submitted a visible emissions observation test done on May 15, 1992 at the sister facility in Palatka, FL. The attached results page shows that no visible emissions were observed for the entire duration of the test while the facility was in full operation. The nature of the operation indicates that no visible emissions are expected due to the high volume of air exhausted and the low level of particulate emissions.

In addition, large doors located near the sanding and grinding process is the main emission point for particulates. Therefore, the existing particulate emissions are of a fugitive nature. A visible emissions test cannot be done on a fugitive source of emission.

COMMENTS

1. EPA COMMENT

The District did not include Standard Element 7.0 of District Rule 2070 in the comparison of requirements between District Rule 2070 and Kings County Rule 208 (Table 5 in the engineering analysis portion of the permit).

DISTRICT RESPONSE

Table 5 in the proposed engineering evaluation will be replaced with the following table in the revision:

Table 5 - Comparison of District Rule 2070 and Kings County Rule 208

Requirement	District	KCAPC D
ATC or PTO applications shall be denied unless the applicant shows that Health and Safety Codes Section 41700, 41701, or 42301 are not violated.	X	
ATC or PTO applications shall be denied unless the applicant shows that Health and Safety Codes Section 41700 or 41701 are not violated.	X	X
PTO applications shall be denied unless the applicant follows the ATC.	X	X
ATC or PTO applications shall be denied unless the applicant complies with Rule 2201.	X	
ATC or PTO applications shall be denied unless the applicant will comply with both NSPS and NESHAP requirements.	X	
A person shall not operate any source operation contrary to conditions specified on the Permit to Operate.	X	